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NEWS

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Salmon Smolt Release Q&A

Q: Why are the fish being released at this particular location?

A: All of the smolts in this release were raised at Nimbus Hatchery, and the goal is for them to return to their home waters in two to five years to spawn. By releasing them at the mouth of the river to the hatchery instead of further down river, biologists hope to improve the chances that they'll find their way home.

Q: What are the typical return rates for salmon from this hatchery?

A: Less than one percent.

Q: How do the salmon know how to find their way back to where they were raised?

A: Salmon will follow "chemical cues" in the water based on soil and mineral content, which serve as markers for them on their journey home.

Q: Does this always work?

A: No. Sometimes the salmon will divert to another river and end up spawning along with another run. Scientists have been studying the reasons for this.

Q: Why does it matter where they spawn?

A: When a salmon spawns in a different river or outside of its own run, the genetic integrity of that river's salmon population can be compromised. DFG is taking steps to ensure that the runs don't commingle.

Q: Why does it matter if they commingle?

A. The different types of salmon in each river evolved over thousands of years to adapt to their surroundings and the timing of annual natural events like high and low flows. Each species and run develops unique adaptations to survive. They pass these survival traits on to their offspring.

Q: How do biologists know where a salmon originated?

A: DFG tags its hatchery-raised smolts with coded wire tags, which show when and where they were released. Starting in 2007, 25 percent of 32.6 million salmon smolts were imbedded with these tags, and last year, the first of the tagged fish returned to the Central Valley rivers.

Q: Releasing the smolts further upstream means they have a longer journey to the ocean. How will DFG make sure that the fish survive?

A: DFG is working with the Bureau of Reclamation (BOR) to coordinate release timing, flows and closure of the Cross Channel Gates operated by BOR during the short migration period.

Q: Does this release take the place of the releases in San Pablo Bay that DFG conducted last year?

A: No. DFG will also truck a significant number of smolts to San Pablo Bay for release from the DFG-operated hatcheries in the Central Valley. Approximately 14 million salmon smolts will be transported and acclimated in San Pablo Bay this spring as part of the overall effort to increase survival and adult returns of Central Valley fall-run Chinook salmon.

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